

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Reserve
1.96
R31Fsn

FALL WATER SUPPLY SUMMARY FOR NEVADA



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
NEVADA DEPARTMENT of CONSERVATION
and NATURAL RESOURCES

Data included in this report were obtained by the agencies named above in cooperation
with Federal, State and private organizations listed inside the back cover of this report.

AS OF
Oct. 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW SURVEYORS MAKING SPECIAL MEASUREMENTS OF

THE SNOWPACK NEAR MT. ST. HELENS VOLCANO, WASHINGTON, APRIL 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GERALD THOLA

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
RENO, NEVADA

In Cooperation with

ROLAND D. WESTERGARD

DIRECTOR
DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES
CARSON CITY, NEVADA

Report prepared by

THE SNOW SURVEY UNIT
SOIL CONSERVATION SERVICE
P. O. BOX 4850
RENO, NEVADA

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK FOR NEVADA	1-2
NEVADA STREAMFLOW FORECASTS AND OBSERVED STREAMFLOW	3
RESERVOIR STORAGE STATUS.	3
PRECIPITATION	4-8
SNOTEL CHARTS (Snow Pillow Gage and Precipitation Gage)	
Dorsey Basin	9
Independence Camp.	10
Marlette Lake.	11
Wet Meadows.	12
LIST OF COOPERATORS	Inside Back Cover

ALL AVERAGES ARE FOR 1963-77.

WATER SUPPLY OUTLOOK FOR NEVADA

* THE WATER AVAILABILITY FOR THE SUMMER OF 1982, WILL BE DEPENDENT ON THIS
* WINTER'S PRECIPITATION AND SNOWPACK.
*
* STREAMFLOWS THIS PAST SEASON, APRIL 1 THROUGH JULY 31 WERE CONSIDERABLY
* BELOW AVERAGE BUT THEY WERE HIGHER THAN THE SUMMER OF 1977. THE STREAM-
* FLOWS RANGED FROM 35 PERCENT OF AVERAGE ON THE TRUCKEE AND CARSON RIVERS
* TO 60 PERCENT ON THE WEST WALKER RIVER. ALL STREAMFLOWS WERE BELOW THE
* APRIL 1, 1981 PREDICTED AMOUNTS DUE TO THE LIMITED AMOUNT OF PRECIPITATION
* RECEIVED DURING THE SUMMER.
*
* THE SEVEN MAJOR RESERVOIRS PROVIDING WATER FOR THE IRRIGATED AREAS OF THE
* STATE NOW CONTAIN 355,000 ACRE-FEET OF WATER AS COMPARED TO LAST YEARS
* 883,000 ACRE-FEET. THE OCTOBER 1 AVERAGE FOR THE RESERVOIRS IS 786,000
* ACRE-FEET. MORE WATER WAS USED THIS SUMMER FROM THESE RESERVOIRS THAN
* DURING THE SUMMERS OF 1976 AND 1977.

Streamflows this season for the east slope of the Sierra ranged from 35 percent of average on the Truckee and Carson Rivers to 60 percent on the West Walker River. Lake Tahoe Rise was .54 feet for April 1 to the high elevation. This rise was 38 percent of average.

The East Carson and West Carson Rivers had flows of 53 and 57 percent respectively but downstream the flows were only 35 and 39 percent at Fort Churchill and Carson City. Late summer flows have been almost non-existent except for supplemental water from the reservoirs.

The Humboldt River at Palisade flowed 38,000 acre-feet of water during April 1 to July 30 for an average of only 17 percent. Tributaries to the Humboldt had very limited streamflows as this basin was hardest hit by the below average precipitation.

Storage in the reservoirs since October 1, 1980 and April 1, 1981 has decreased significantly. Total water released from the reservoirs since April 1 has been 598,000 acre-feet. This is considerably above the 474,000 released in 1976 and the 453,000 in 1977.

A comparison is shown for the Truckee-Tahoe Basins for the past seven years.

TAHOE-TRUCKEE BASINS

Year	Percent Snow Water as of April 1	Truckee River at Farad April 1-July 31 (1,000 acre-feet)	Lake Tahoe Stage Rise in feet* April 1 to High Elev.	Reservoir Storage** (1,000 acre-feet) April 1 October 1
1981	60	95	.54	553 183
1980	134	355	1.86	458 604
1979	87	177	1.13	237 215
1978	128	318	1.37	188 253
1977	33	51	.31	208 42
1976	47	59	.21	668 398
1975	158	367	1.92	756 785
1963-77 Average	100	273	1.42	653*** 626***

* One foot of rise equals approximately 122,000 acre-feet.

** Total of useable storage in Lake Tahoe, Boca, Stampede and Prosser Reservoirs.

*** Stampede and Prosser Reservoirs have 7 and 14-year averages, respectively, included in this total

Lake Tahoe useable storage is between the elevations of 6,223.0 and 6,229.1 feet. The October 1 level was 6,224.51 feet. The high elevations attained each year since 1975 are:

June 8, 1981 - 6,226.53 feet
July 20, 1980 - 6,227.32 feet
June 11, 1979 - 6,225.15 feet
June 11, 1978 - 6,225.20 feet
June 11, 1977 - 6,224.22 feet
May 23, 1976 - 6,227.04 feet
July 16, 1975 6,228.60 feet

Lake Mead contains 21,873,000 acre-feet of water for 127 percent of average but 1,764,000 acre-feet than last year.

APRIL - JULY 1981
 NEVADA STREAMFLOW FORECASTS
 AND
 OBSERVED STREAMFLOW

The following table contains April-July forecasts made during the past winter. Observed streamflow quantities are provisional as furnished by the U.S. Geological Survey.

FORECAST STREAMS	APRIL-JULY STREAMFLOW (1,000 acre-feet)						
	FORECAST			OBSERVED		AVERAGE	OBSERVED
	Feb. 1 1981	Mar. 1 1981	Apr. 1 1981	May 1 1981	1981	1963-77	1981 as % of 15-year average
<u>TRUCKEE RIVER</u>							
Little Truckee above Boca, CA ^{1/}	50	40	40	35	37	87	43
Truckee River at Farad, CA ^{1/}	165	140	140	130	95	273	35
Lake Tahoe Rise, CA ^{3/}	0.8	0.6	.65	.65	.54	1.42	38
<u>CARSON RIVER</u>							
E. Carson nr Gardnerville, NV	125	115	120	115	100	187	53
E. Carson nr Gardnerville, NV (Date of 200 c.f.s. flow)	---	7/8	7/10	7/16	6/22	7/24	---
(Date of 500 c.f.s. flow)	---	---	6/15	6/11	6/11	6/28	---
W. Carson at Woodfords, CA	35	32	35	35	30	53	57
Carson nr Carson City, NV	115	95	100	95	71	183	39
Carson nr Ft. Churchill, NV	100	85	90	85	58	167	35
<u>WALKER RIVER</u>							
E. Walker nr Bridgeport, CA ^{2/}	50	40	45	45	36	69	52
W. Walker below Little Walker nr Coleville, CA	110	90	100	95	87	146	60
<u>HUMBOLDT RIVER</u>							
Humboldt R. at Palisade, NV	100	75	90	75	38	221	17

1/ Corrected for storage above station.

2/ April-August flow, corrected for storage.

3/ Maximum rise in feet from April 1, assuming gates closed.

RESERVOIR STORAGE STATUS
 October 1, 1981

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (1,000 acre-feet)	USABLE STORAGE (1,000 acre-feet)			15-year Average 1963-77
			1981	1980	1979	
Owyhee	Wild Horse	72	23	49	32	28
Lower Humboldt	Rye Patch	172	70	173	104	109
Colorado	Mohave	1,810	1,475	1,445	1,428	1,413
Colorado	Mead	26,159	21,873	23,637	22,242	17,248
Tahoe	Tahoe	732	183	412	101	456
Truckee	Boca	41	28	30	31	20
Truckee	Prosser	30*	13	14	26	14**
Truckee	Stampede	220	71	145	57	136**
Carson	Lahontan	291	44	168	140	138
West Walker	Topaz	59	7	28***	111	19
East Walker	Bridgeport	42	3	23	11	16

* Flood control use allocation of 20,000 acre-feet between November 1 and April 10.

** Prosser storage began 1/30/63; Stampede storage began 8/1/69.

*** Reservoir storage as of 9/22/81.

PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	PERIOD OF MEASUREMENT	CURRENT RECORD		PAST RECORD
			ACCUM. PRECIP. FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/80	ACCUM. PRECIP. PREVIOUS YEAR
<u>TAHOE-TRUCKEE</u>					
Echo Peak (CA)	7,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.7 0.2 0.1 0.3 0.5	30.7 30.9 31.0 31.3 31.8	----- 55.4 67.3 67.3 67.3
Fallen Leaf (CA)	6,240	4/28/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.8 0.0 1.0	18.6 18.6 19.6	44.5 44.6 45.5
Hagan's Meadow (CA)	8,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.9 0.0 0.2 0.2 0.5	21.0 21.0 21.2 21.4 21.9	43.6 44.4 46.1 46.1 46.2
Heavenly Valley (CA)	8,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.0 0.0 0.0 0.4	22.1 22.1 22.1 22.1 22.5	42.0 42.5 42.9 44.0 45.2
Independence Camp (CA)	7,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.6 0.3 0.0 0.6	22.7 23.3 23.6 23.6 24.2	44.3 44.8 45.5 45.6 46.2
Independence Creek (CA)	6,500	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.4 0.0 0.0 0.5	22.5 22.9 22.9 22.9 23.4	34.2 34.2 34.6 34.7 34.7
Independence Lake (CA)	8,450	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.0 0.7 0.0 0.7	29.5 29.5 30.2 30.2 30.9	59.9 60.7 61.2 61.2 61.5
Marlette Lake	8,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.7 0.0 0.0 0.1 0.8	21.7 21.7 21.7 21.8 22.6	42.8 43.1 43.1 43.3 44.2
Mt. Rose	9,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.1 0.7 0.0 0.0 0.5	20.7 21.4 21.4 21.4 21.9	42.0 42.7 43.2 43.5 45.0
Mt. Rose Ski Area	8,850	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	6.2 0.0 0.0 0.0 0.6	35.8 35.8 35.8 35.8 36.4	----- 70.6 71.0 71.0 72.4
Rubicon #2 (CA)	7,500	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.0 0.0 0.0 0.8	26.8 26.8 26.8 26.8 27.6	----- ----- ----- 53.9 53.9
Squaw Valley Gold Coast (CA)	7,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.6 0.5 0.0 0.0 1.1	40.0 40.5 40.5 40.5 41.6	----- ----- ----- 84.4 86.3
Tahoe City Cross (CA)	6,750	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.4 0.3 0.0 0.0 0.4	24.2 24.5 24.5 24.5 24.9	----- 50.9 51.2 51.2 51.2
Truckee #2 (CA)	6,400	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.1 0.1 0.0 0.0 0.5	21.3 21.4 21.4 21.4 21.9	----- 41.8 42.1 42.1 42.1
SNOTEL Provisional					

PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	PERIOD OF MEASUREMENT	CURRENT RECORD		PAST RECORD
			ACCUM. PRECIP. FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/80	ACCUM. PRECIP. PREVIOUS YEAR
<u>TAHOE-TRUCKEE (contd.)</u>					
Ward Creek #3 (CA)	6,750	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.4 0.1 0.0 0.0 0.9	40.6 10.7 40.7 40.7 41.6	82.7 34.1 84.8 84.8 84.8
<u>CARSON-WALKER</u>					
Blue Lakes (CA)	8,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.5 0.1 0.0 0.0 1.2	32.9 33.0 33.0 33.0 34.2	----- ----- 61.3 61.3 61.3
Ebbets Pass (CA)	8,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.6 0.0 0.0 0.0 0.5	38.3 38.3 38.3 38.3 38.8	67.3 68.4 69.4 69.4 70.9
Leavitt Meadows (CA)	7,200	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.5 0.1 0.1 0.2 1.0	21.7 21.8 21.9 22.1 23.1	----- ----- 40.4 41.0 42.0
Lobdell Lake (CA)	9,200	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.6 0.4 0.2 0.0 0.5	19.1 19.5 19.7 19.7 20.2	32.7 32.8 32.9 33.2 35.3
Pine Nut Creek (CA)	6,000	4/30/81 - 9/29/81	0.7	8.4	-----
Poison Flat (CA)	7,900	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.4 0.0 0.0 0.4 0.4	20.6 20.6 20.6 21.0 21.4	----- ----- 43.6 44.2 44.9
Sonora Pass Bridge (CA)	8,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.4 0.2 0.0 0.0 0.9	25.9 26.1 26.1 26.1 27.0	47.4 48.0 49.7 49.8 51.5
Spratt Creek (CA)	6,080	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.4 0.0 0.0 0.0 1.4	21.2 21.2 21.2 21.2 22.6	----- ----- ----- ----- -----
Virginia Lakes Ridge (CA)	9,200	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	0.8 0.3 0.0 0.0 0.0	20.8 21.1 21.1 21.1 21.1	36.1 36.1 36.3 36.4 38.3
Wet Meadows #2 (CA)	8,050	5/01/81 - 5/30/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	1.6 0.2 0.1 0.0 0.8	31.5 31.7 31.8 31.8 32.6	----- ----- ----- 64.0 64.6
<u>HUMBOLDT</u>					
Big Creek Summit	8,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/21/81	2.6 0.3 0.0 0.2 0.0	17.3 17.7 17.7 17.9 17.9	----- ----- ----- 25.0 27.3
Buckskin, Lower	6,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.5 1.0 1.0 0.0 0.7	17.6 18.6 19.6 19.6 20.3	----- 27.6 27.6 27.7 29.3
SNOTEL Provisional					

PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT RECORD			PAST RECORD
		PERIOD OF MEASUREMENT	ACCUM. PRECIP. FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/80	
<u>HUMBOLDT (Cont.)</u>					
Corral Canyon	8,500	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	6.0 0.5 0.0 0.3 0.9	21.0 21.8 21.8 22.1 23.0	31.7 33.8 34.1 34.4 36.8
Oorsey Basin	8,100	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.4 0.4 0.3 0.0 0.5	21.0 21.4 21.7 21.7 22.2	34.5 36.5 37.9 38.7 40.1
Fry Canyon	6,700	4/28/81 - 7/20/81 7/21/81 - 9/30/81	4.6 1.0	16.0 17.0	----- -----
Granite Peak	7,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.9 1.1 0.8 0.1 0.9	20.6 21.7 22.5 22.6 23.5	----- ----- ----- 37.5 38.0
Green Mountain	8,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	5.4 0.9 0.7 0.2 0.6	19.8 20.8 21.5 21.7 22.3	----- ----- 32.3 32.5 35.1
Lamance Creek	6,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.6 0.5 0.3 0.0 0.9	16.8 17.4 17.7 17.7 18.6	----- ----- ----- 32.3 34.6
Lamoille #3	7,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.8 0.6 0.0 0.5 1.2	18.0 18.6 18.6 19.1 20.3	----- ----- 36.7 37.2 39.0
Martin Creek	6,700	3/25/81 - 7/15/81 7/16/81 - 9/30/81	8.0 0.7	19.3 20.0	----- 36.7
Midas	7,200	3/25/81 - 9/30/81	5.2	11.5	-----
Rodeo Flat	6,800	3/25/81 - 7/20/81	2.7	9.5	-----
Trout Creek, Lower	6,900	3/24/81 - 9/17/81	7.0	12.2	30.9
<u>SNAKE-OWYHEE</u>					
Bear Creek	7,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	6.4 1.0 0.4 0.0 0.7	24.7 25.7 26.1 26.1 26.8	34.2 36.7 38.2 38.5 41.3
Big Bend	6,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.8 0.3 0.0 0.0 0.3	12.4 12.7 12.7 12.7 13.0	17.6 19.3 19.7 19.7 21.3
Boies Reservoir	5,800	10/01/80 - 7/22/81 7/23/81 - 9/16/81	3.5 0.0	3.5 3.5	----- -----
Fawn Creek	7,000	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	5.8 0.4 0.0 0.0 0.5	25.5 25.9 25.9 25.9 26.4	----- ----- 38.6 38.9 39.9
Goat Creek	8,800	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.2 1.2 0.0 0.2 0.6	19.6 20.8 20.8 21.0 21.6	----- ----- 39.5 39.7 40.1
SNOTEL Provisional					

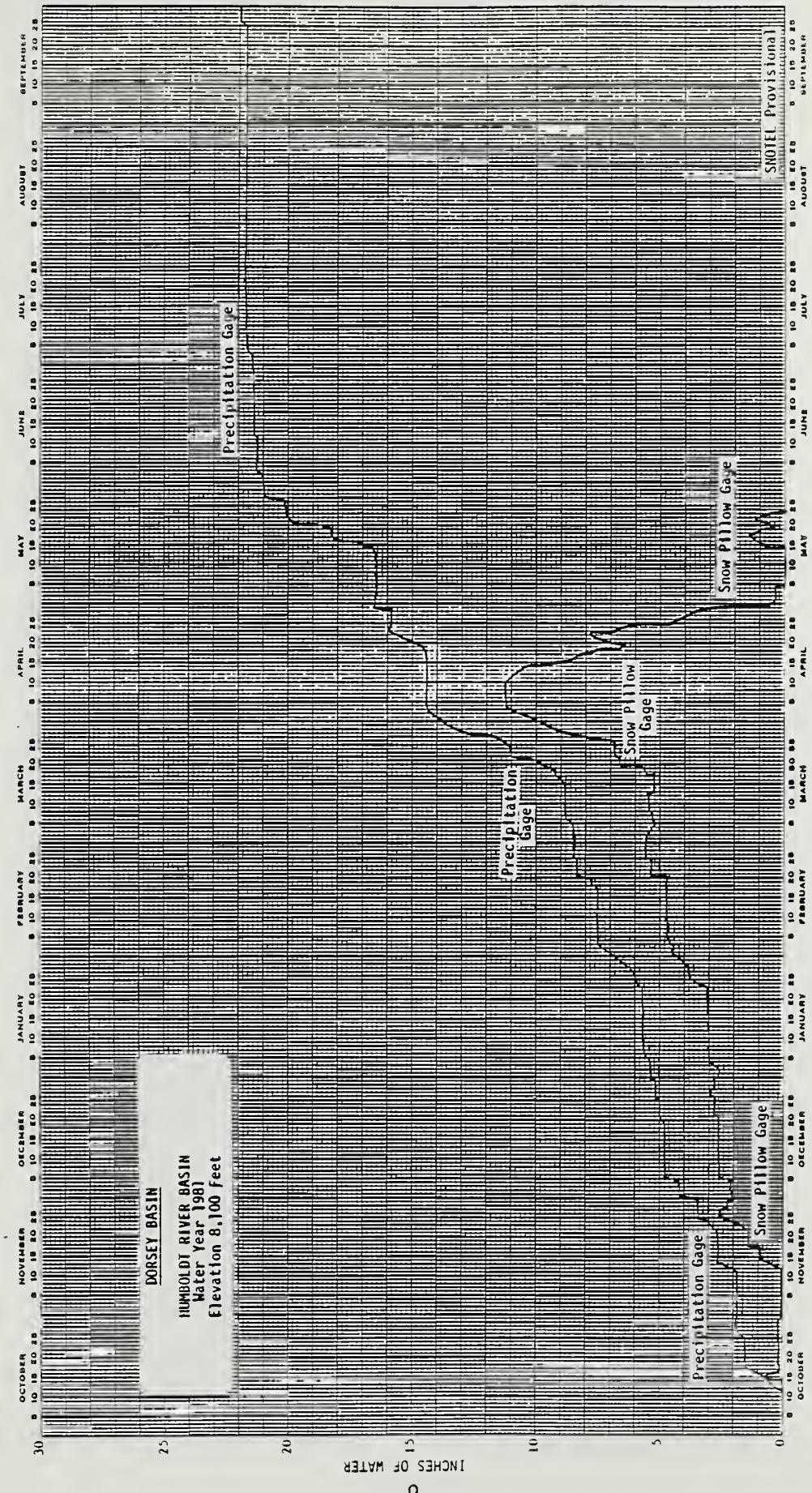
PRECIPITATION (Inches)

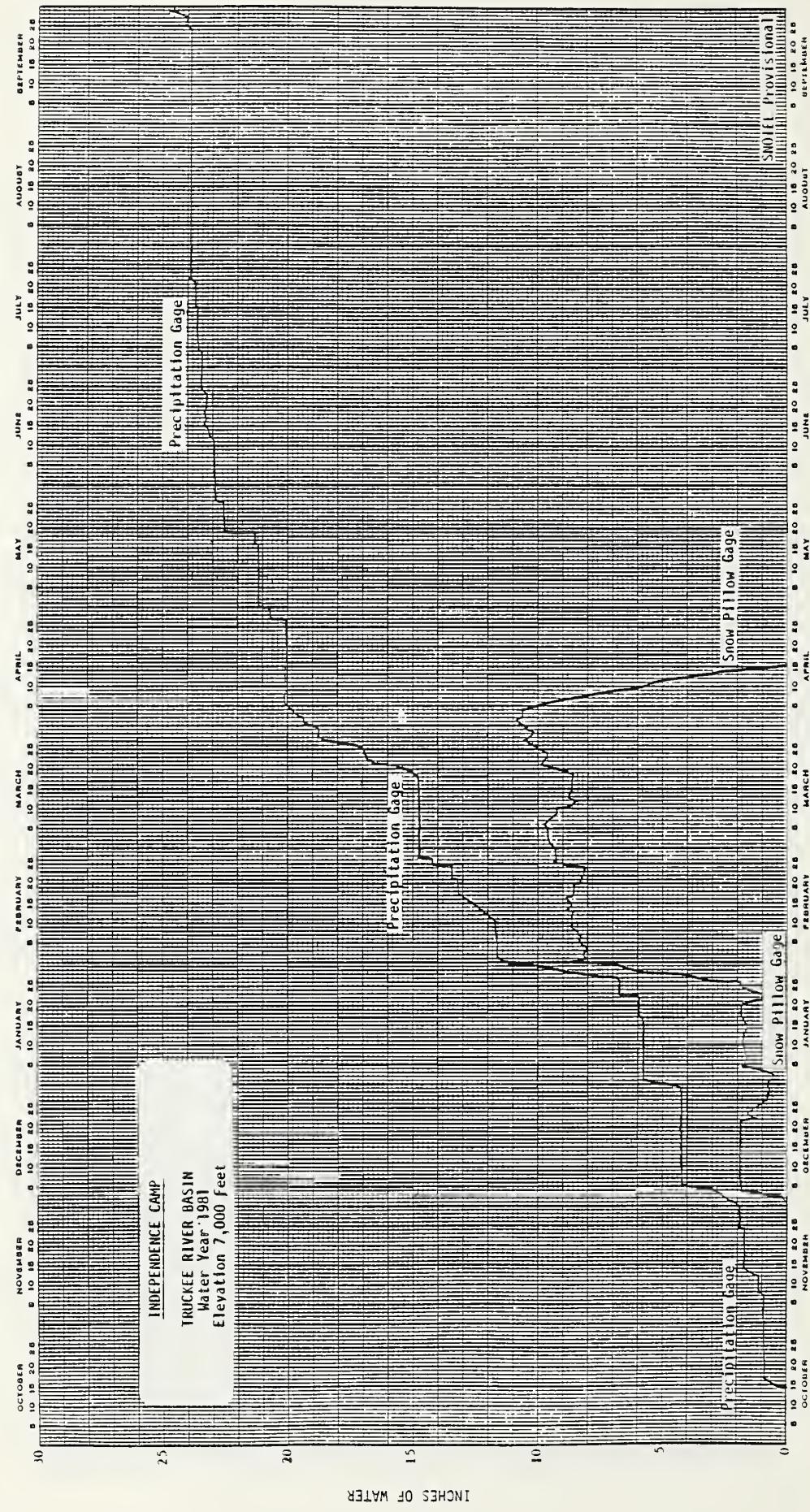
BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT RECORD			PAST RECORD
		PERIOD OF MEASUREMENT	ACCUM. PRECIP. FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/80	
<u>SNAKE-OWYHEE (Cont.)</u>					
Jack Creek #2, Upper	7,250	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.4 0.5 0.0 0.0 1.0	21.0 21.5 21.5 21.5 22.5	26.3 28.3 28.3 28.5 30.6
Jacks Peak	8,420	3/25/81 - 7/18/81 7/18/81 - 8/19/81 8/19/81 - 8/31/81 9/01/81 - 9/30/81	12.3 0.0 0.0 1.0	28.1 28.1 28.1 29.1	---- ---- ---- 46.6
Laurel Draw	6,700	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.6 1.3 0.0 0.2 1.2	18.4 19.7 19.7 19.9 21.1	25.7 27.7 28.2 28.6 29.8
Pole Creek Ranger Station	8,330	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.0 0.7 0.3 0.6 0.9	12.0 12.7 13.0 13.6 14.5	---- ---- 24.9 25.4 27.5
Seventy Six Creek	7,100	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.7 0.6 0.4 0.3 0.7	13.3 13.9 14.3 14.6 15.3	20.2 21.6 21.9 22.4 24.6
Taylor Canyon	6,300	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/24/81	2.5 0.0 0.0 0.0 0.0	7.6 7.6 7.6 7.6 7.6	---- 13.0 13.5 14.2 14.2
<u>EASTERN NEVADA</u>					
Berry Creek	9,100	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.3 1.1 0.2 0.2 0.8	19.3 20.4 20.6 20.8 21.6	---- ---- 27.5 28.4 31.8
Hole-in-Mountain	7,900	3/24/81 - 5/19/81 5/19/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	5.0 0.1 0.3 0.0 0.7	15.2 18.9 19.2 19.2 19.9	---- ---- 39.7 41.1 43.9
Ward Mountain	8,900	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	4.7 0.6 0.7 0.0 1.4	19.4 20.0 20.7 20.7 22.1	---- ---- 31.4 32.1 34.5
<u>NORTHERN GREAT BASIN</u>					
Cedar Pass (CA)	7,100	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	3.0 1.5 0.7 0.0 0.8	23.9 25.4 26.1 26.1 26.9	39.7 41.9 42.5 42.5 43.3
Disaster Peak	6,500	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.5 0.5 0.4 0.0 0.3	13.2 13.7 14.1 14.1 14.4	---- ---- 24.9 24.9 25.9
Dismal Swamp #2 (CA)	7,050	5/01/81 - 5/31/81 6/01/81 - 6/30/81 7/01/81 - 7/31/81 8/01/81 - 8/31/81 9/01/81 - 9/30/81	2.8 1.8 0.3 0.0 1.4	31.8 33.6 33.9 33.9 35.3	---- ---- ---- 50.0 50.7
Ferguson Ranch	5,560	3/26/81 - 5/08/81 5/08/81 - 6/19/81 6/19/81 - 7/22/81	0.2 0.3 0.0	---- ---- ----	---- ---- ----
Mt. Bidwell	7,240	3/27/81 - 7/29/81	6.5	30.5	----
SNOTEL Provisional					

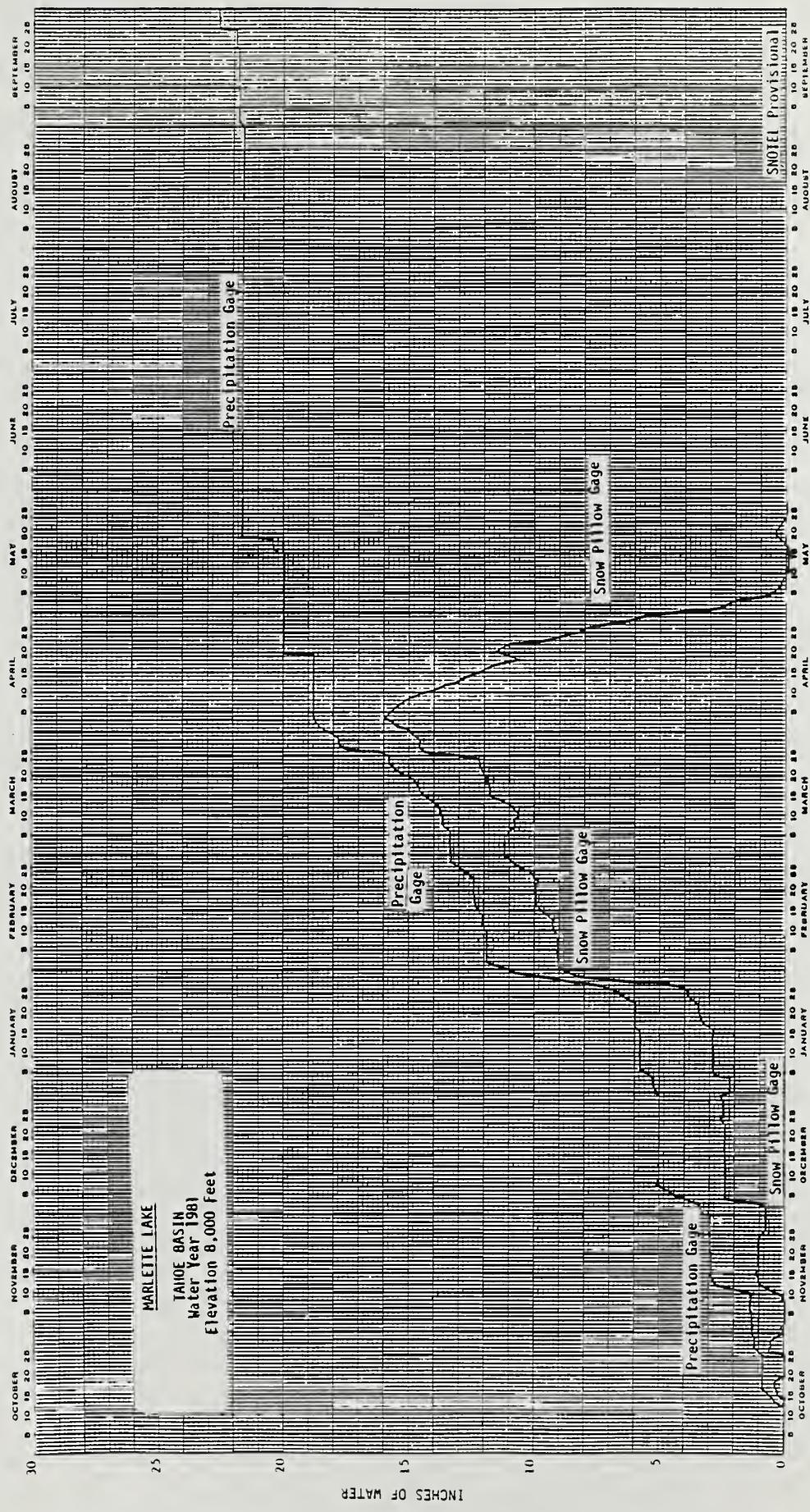
PRECIPITATION (Inches) FOR SEPTEMBER 1981 - NATIONAL WEATHER SERVICE

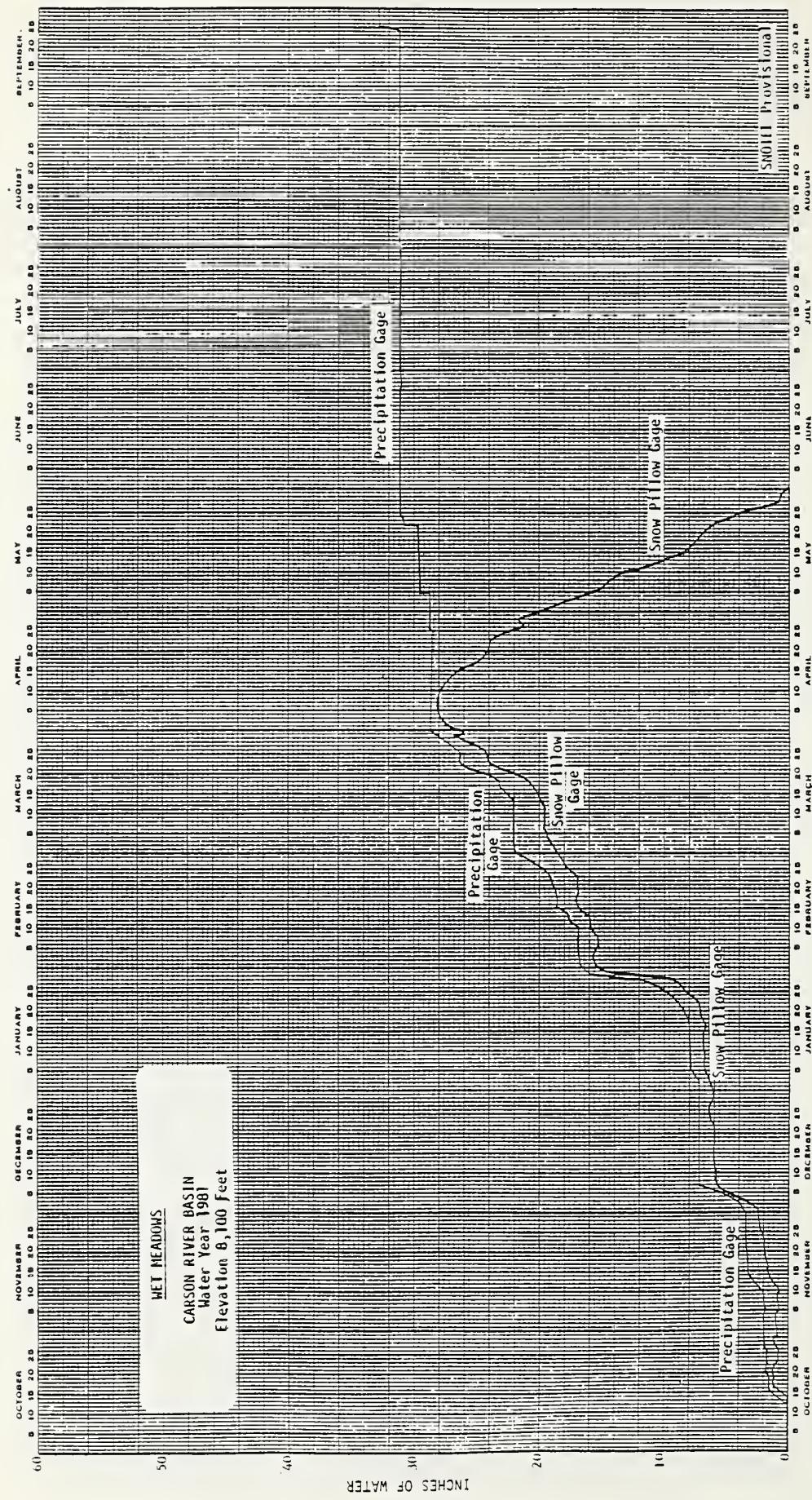
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			October, 1980 through September, 1981		
		Month's Precip.	Last Year	Normal	This Year	Last Year	Normal
<u>TRUCKEE-TAHOE</u>							
Boca	5,575	.47	.90	.37	13.35	27.95	22.29
Glenbrook	6,350	.51	.21	.46	12.12	21.29	18.10
Incline Village	6,550	.30	.58		28.54	22.05	
Reno	4,404	.07	.48	.23	3.89	10.68	7.20
Sierraville	4,975	.53	.08	.39	14.57	33.39	27.29
Tahoe City	6,230	.51	.39	.42	21.55	46.55	33.13
Truckee Ranger Station	5,995	.52	.76	.37	19.00	39.56	32.32
<u>CARSON-WALKER</u>							
Bridgeport Ranger Station	6,560	.25	.25	.43	7.92	16.66	11.77
Carson City	4,651	.21	.57	.28	6.23	16.05	11.50
Fallon Experiment Station	3,965	.56	.25		6.05	4.72	
Hawthorne	4,215	.26	.50	.14	5.69	4.57	4.04
Minden	4,720	.06	.40	.21	3.91	11.17	8.51
Twin Lakes	7,829		.43	.73		59.07	51.13
Woodfords	5,971		.74	.57		29.90	20.69
Yerington	4,375	.13	.23	.28	3.60	4.56	5.46
<u>HUMBOLDT</u>							
Austin	6,605	.10	1.31	.45	10.80	13.10	11.90
Battle Mountain	4,530	.93	.47	.29	6.60	10.57	7.56
Deeth	5,338	.41	1.04	.44	6.88	20.08	9.25
Elko	5,075	.13	.42	.34	5.32	13.67	9.78
Emigrant Pass	5,755	.20	.54	.34	7.49	9.96	11.50
Jiggs	5,760	.32	1.08	.47	9.68	17.48	11.55
Lamoille	5,800	.29	.66	.70	10.64	19.26	18.61
Lovelock FAA	3,900	.30	.55	.28	3.66	5.97	4.88
North Fork	6,600	.97	.98	.31	10.03	16.80	16.89
Paradise Valley	4,675	.21	1.27	.30	5.63	13.34	9.31
Wells	5,650	.19	1.05	.46	5.49	16.81	10.58
Winnemucca	4,301	.23	.18	.28	5.36	7.85	8.47
<u>SNAKE-OWYHEE</u>							
Contact	5,365	.13	.70	.51	5.47	13.66	8.33
Mountain City	5,620	.68	.81		3.69	17.41	
Owyhee	6,491	.53	1.03	.57	11.88	13.41	14.51
Tuscarora	6,170	.48	.94	.56	8.29	17.50	13.89
<u>EASTERN NEVADA</u>							
Arthur	6,280	.62	1.36	.57	8.22	23.18	14.88
Ely	6,253	.36	1.65	.61	8.24	11.85	8.70
Montello	4,880	.12	.69	.37	3.80	10.30	7.17
Pequop	6,030	.68	.95		4.92	20.62	
Ruby Lake	6,012	.26	1.64	.54	6.70	21.94	12.49
<u>NORTHERN GREAT BASIN</u>							
Alturas Ranger Station	4,400	.66	.41	.33	8.45	12.92	13.27
Cedarville	4,670	.51	.73	.31	9.73	18.43	14.20
Ft. Bidwell	4,498	.81	.67	.39	13.60	20.64	15.67
Orovada	4,310	.23	.82	.32	8.00	11.05	11.22
Susanville	4,148	.41	.32	.32	8.14	17.42	14.45
<u>CENTRAL GREAT BASIN</u>							
Tonopah	5,426	.12	.83	.35	5.57	4.20	4.20
<u>LOWER COLORADO RIVER</u>							
Caliente	4,402	1.13	1.16	.52	9.48	11.22	8.72
Las Vegas	2,162	.25	.18	.27	2.75	5.85	3.76
Pioche	6,165	.93	2.66	.64	10.73	18.74	13.12

Normals for Period 1941-70









AGENCIES COOPERATING IN COLLECTING DATA CONTAINED IN THIS BULLETIN

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U. S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
Division of Water Resources
Nevada State Forester
Oregon Cooperative Snow Surveys
University of Nevada, Desert Research Institute
Utah Cooperative Snow Surveys
White Mountain Research Station, Univ. of California

PRIVATE

Amalgamated Sugar Company
Kennebott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee - Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
P.O. Box 4850
RENO, NEVADA 89505
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

U.S.D.A.
SOIL CONSERVATION SERVICE
RENO, NEVADA

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101

FIRST CLASS MAIL

607 2181

UNIVERSITY OF NEVADA
RENO
LIBRARY

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

USDA, NAT'L AGRICULTURAL LIB
TIS/SEA/USDA, RM 002
CURRENT SERIAL RECORD
BELTSVILLE, MD

20705

*"The Conservation of Water begins
with the Snow Survey"*